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To: Cereals Genomics Research Community
From: R. S. Zeigler
Date: 7 November, 2002

Folks,

As some of you may have already heard, USAID has granted us start up funds for the Comparative Cereals Genomics program that we envisioned down in Mexico 18 months ago.

First I would like to thank all of you for the effort and support you have invested in this process. I would also like to thank those who were able to generate explicit political support from your Washington delegations to the USAID Administrator. I have been told by the Deputy Administrator that this expression of interest, along with broad backing within the scientific community, was key to our receiving funding over other competing interests. Interestingly enough, people at USAID welcome this kind of input from the legislative branch.

In the following I would like to lay out where we are and what we can reasonably expect in terms of funding and timing over the next several years. Then I will propose a process by which we can implement this program, focusing on the competitive granting process. Jeff Bennetzen and Dave Hoisington provided significant inputs into drafting this process.

FUNDING SITUATION

USAID has made $350K of start-up funds available from FY 02 funds. This money is to cover activities between now and September 2003. Near the end of the next Federal fiscal year (August 2003) we can expect $1 – 2 million to be made available, assuming USAID likes what it sees and budget projections are more or less on target. Then in FY 04, again assuming we remain in USAID's favor and we can maintain the political support, we should try to target the $5 million level. This will probably be the limit to what we can get from USAID directly. But, I have been talking with USAID and USDA and they are interested in generating a multiagency program in this area. So there may be room for continued growth in funding.

The key obviously will be to keep USAID interested in what we are doing. From my discussions with them it is very clear that they want to see **a science driven, impact oriented and managerially lean research and training/education program relevant to developing countries, especially Africa.** Equally important is that they want to see partnership with CGIAR centers and have involvement of national program scientists from developing countries. They will want to see early signs that we can develop effective partnerships and accomplish projects that will help address previously intractable problems. It will behoove us early on to pick the low hanging fruit, so to speak.

With this funding then, in the first year we will want to establish the program, get some high impact research going and make sure we have developed some exciting, highly promising and peer reviewed projects that are ready to implement immediately upon release of the next (and increased) round of funds.

IMPLEMENTATION

We will support three areas in the first year: Program Management ($40 – 50K), First Generation Projects (~$200K), and initiating the Competitive Grants process ($100K for planning grants). The major emphasis in this program will be the competitive grants and a draft process for implementing this program is sketched out below. Two underpinning principles of this program are: 1) rapid progress has been made in rice genomics and this knowledge can be applied to the other cereals; and, 2) the genomics approach offers means to accelerate improvement of the minor, or "orphaned" cereals.

Coordination and Management:

Scientific oversight and guidance for the program and the competitive grants component will be obtained from a small committee of scientists. For internal USAID reasons funds must be routed initially via a CGIAR center. IRRI has agreed to serve as a conduit for these funds. Bob Zeigler will initially manage the program out of his offices in the KSU Department of Plant Pathology and Plant Biotechnology Center. In early December 2002 Bob will travel to IRRI for a microarray meeting and will begin to work out operational details at that time. A part time assistant will be hired in the first year. A web site will be established and as much of the communications, proposal submissions etc. as possible will be handled via the Web. Any growth in management support will be determined by growth in the program.

First Generation Projects:

Two defining characteristics of this program as conceived in Mexico are transparency and competitive awards. There are insufficient research funds available for the first year (a maximum of $200 K) to justify a fully competitive process or initiate and execute new projects over a nine – twelve month period. However, it is important that visible progress be made during the first year in both research and establishment of a managerial framework. So, getting relevant research up and running immediately without violating the spirit of the program is quite a challenge.

Our solution is to commission two or more one-year projects of up to $100 K each by early January that will have been subjected to an accelerated review process. After their first year, these first generation projects will enter the competitive process and will continue only if they are selected in the competition with other pre-proposals and full proposals. The funded projects will be fully consistent with our commitments to USAID in the program documents we submitted to them (see attached document) and that were based on the recommendations that came out of the Mexico meeting. These commitments specify that we will first focus on characterizing genetic diversity in cereal germplasm collections and elite breeding material. Included in this first set of activities was the development of databases and bioinformatics platforms to allow the analysis of the molecular and phenotypic data.

Lead PIs for the First Generation Projects are limited to those who participated in the Mexico meeting. An individual can appear on only one First Generation Project proposal. A PI from

a US institution must submit the proposal, and partnership with researchers in developing countries and/or a CGIAR center is strongly encouraged.

Proposals must be limited to a maximum of three pages of text (12 pt.) illustrations and tables, which will include rationale, approach/methods, expected products after one year, and relevance to the cereals comparative genomics initiative. References cited should be numbered and not exceed one additional page. Budget (not to exceed $100K including indirects) and budget justification should not exceed one additional page and indirect and overhead charges are limited to a maximum of 19%. Include a one page CV for at least one PI from each institution and do not exceed three CVs. The CVs should clearly illustrate that the PIs are capable of undertaking the proposed work.

The proposals should be submitted to Bob Zeigler via e-mail (rzeigler@ksu.edu) no later than 5PM December 10 local time. They will then be sent to a small external panel for evaluation. Awards based on the panel evaluations will be made by mid-January.

Implementation Process for Competitive Grants: Outline

Nov. – Dec. 2002:	Adjust program goals, outputs and priorities to reflect likely funding levels. Generate call for pre-proposals and full proposal guidelines
Jan. 2003:	Obtain feedback and issue call for pre-proposals at PAG meeting
Jan. – March 2003:	Name scientific advisory panel
March 2003:	Invite full proposals and issue planning grants
June 2003:	Receive full proposals and send out for peer review
August 2003:	Scientific advisory panel meets, receives presentations from PIs, assesses peer reviews, ranks proposals, and determines awardees
Nov. – Dec 03:	Revise call for pre-proposals to reflect higher funding level and projects funded in first round.
Jan – August 03:	Same process
August 03:	Add conference to discuss first year progress with proposal evaluation

Implementation Process for Competitive Grants: Some Specifics

Draft of Program Scope and Draft Call for Pre-proposals: During the coming year the process for running the competitive grants program must be designed and implemented so that as higher levels of funding come on line there will be approved projects to fund. Draft guidelines for preproposals will be developed by a committee of representatives from CGIAR and US institutions that participated in the Mexico meeting plus one or more representatives from a national agricultural research system in a developing country. This *ad hoc* committee will identify the thematic areas for which pre-proposals will be accepted, establish acceptable level(s) of funding (e.g., will there be opportunities for small and large grants?), establish minimum partnership requirements, limit the number of preproposals an institution can submit, determine contents of proposals, set the policy for indirect cost recovery, set weightings for different components, define criteria for evaluation, and establish the process by which pre-proposals will be screened and recommended for full proposal development. Pre-proposal and proposal guidelines will be based on the outputs of

the Mexico meeting, but adjusted to accommodate the expected levels of funding. This committee will conduct its deliberations via e-mail. It will be dissolved after the guidelines are completed and will have no role in the evaluation or awarding of grants.

Input from the Broader Community: The draft program scope, pre-proposal guidelines etc. will be shared with the US cereals genomics community by e-mail and posting (I hope) on our Web site. We will try to set up a half-day informal discussion on the program in San Diego possibly on the Friday afternoon just before the 2003 PAG. Based on electronic feedback and direct feedback at PAG we will finalize the call for pre-proposals.

Name Scientific Panel*:* We will assemble a scientific advisory panel composed of scientists from the US and other countries. The initial role of this panel will be to review the program scope as developed by the ad hoc committee and modified by the stakeholders. Their principal roles will be to recommend which proposals should be funded each year and assess the progress being made as the program develops.

Planning Grants: The PIs from those preproposals selected to move forward to full proposal development will receive a small grant (up to $10,000, budgeted in their pre-proposal) to enable the parties to get together and develop a full proposal. This grant will be free of indirect costs.

Peer Review: Full proposals will be sent out for review to recognized authorities in the field and for whom there is no COI. PIs will be encouraged to suggest names of potential reviewers. Reviewers will receive the instructions for proposal submission, as well as review criteria and evaluation forms.

Proposal Evaluation: After having had an opportunity to read the peer reviews, the scientific panel will receive presentations from the lead PIs of each of the submitted proposals and can discuss any areas of uncertainty they may have identified. The panel will rank the proposals and determine which are to be funded. After the first year we will continue to have the same proposal evaluation process; but we will add a yearly update by each project that is currently funded.

Annual Conference: An Annual Conference will be held after the first year and will serve as a mechanism to evaluate currently funded projects. An oral presentation of progress will be expected for each funded project. PIs will be encouraged to use this meeting venue as an opportunity for working group meetings amongst their team members. The costs for travel will be part of the original proposal. We will work to have this meeting held at a very attractive site to help us attract and retain high quality panel members.

I look forward to working with you in the coming years.

Sincerely,

(signed)

Robert S. Zeigler
Professor and Head